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10/518,102

12/10/2004

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05/08/2007

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EXAMINER

SHAPIRO, LEONID

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/518,102 | Applicant(s) KRASNOV ET AL. | |
| | Examiner Leonid Shapiro | Art Unit 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-10-04</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,3-6,9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US Patent No. 7,071,613 B2).

As to claim 1, Kim et al. teaches a display device (See Col. 1, Lines 12-14) comprising:

a plurality of emitting pixels (See Fig. 1, Col. 2, Lines 27-32);

at least one switching electronic corresponding to each said pixel for selectively activating or deactivating each said pixel (See Fig. 1, item TFT, Col. 2, Lines 33-48);

at least one additional component for interconnecting said pixels and said switching electronics (See Fig. 1, items TFT, OLED, Col. 2, Lines 33-57);

at least two ambient light reducing members each integrally embedded into said pixels (See Figs. 4-5, items 126a-126c, Col. 7, Lines 37-54); said ambient light reducing members being disposed in a plane that is visible to a viewer (Figs. 4-5, items 126a-126c, 138, Col. 7, Lines 37-54) and selected from

materials and thicknesses such that reduced ambient light reflections in said plane are substantially uniform (See from Col. 4, Line 60 to Col. 5, Line 6).

As to claim 3, Kim et al. teaches emitting pixels are top emitting (See Col. 1, Lines 12-14).

As to claim 4, Kim et al. teaches at least one additional component is a set of bus lines for delivering electrical current to said pixels and said switching electronic (See Fig. 1, item Voltage Line).

As to claim 5, Kim et al. teaches emitting pixels are comprised of an OLED stack and wherein at least one of said ambient light reducing members is integrated with said OLED stack (See Fig. 5, items 126, 128, Col. 7, Lines 20-37).

As to claim 6, Kim et al. teaches ambient light reducing member is integrated with switching electronic (See Fig. 4, items 138, 122, 120, 112).

As to claims 9-10, Kim et al. teaches ambient light reducing member is an optical interference member (See Figs. 4-5, items 126a-126c, Col. 7, Lines 37-54).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Frankel (US Patent No. 6,096,496).

Kim et al. does not disclose emitting pixels are bottom emitting.

Frankel teaches emitting OLEDs are bottom emitting (See from Col. 30, Line 58 to Col. 31, Line 15).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate teachings of Berger et al. in to Kim et al. system in order to be able captured light emitted in any direction (See Col. 31, Lines 1-3 in the Frankel reference).

Allowable Subject Matter

5. Claims 11-12 are allowed.

Relative to independent claim 11 the major difference between the teaching of the prior art of record (Kim et al.) and the instant invention is that an ambient light reducing member integrally embedded into said switching electronic to form part of an electronic circuitry of said switching electronic.

Claim 12 depends on claim 11.

6. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claim 7 the major difference between the teaching of the prior art of record (Kim et al.) and the instant invention is that an ambient light reducing member forms part of a circuitry of said switching electronic.

Claim depends on claim 7.

Telephone Inquire.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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